

DESIGN, DISASTER & DEVELOPMENT RESEARCH FORUM 2

LEARNING FROM URBAN CRISES: 2019

August 29-30 2019 | Report



PARTICIPATING INSTITUTIONS: RMIT University | UIC Barcelona | Aalto University | University of Westminster | KU Leuven | ENSAPB Paris-Belleville | University College London | Politecnico di Milano | Hanken School of Economics | Università di Venezia | UNHCR



RMIT University
Design and Creative Practice + Social Change
Enabling Capabilities Platforms





This report is dedicated to the work of Ian Davis.

A trained architect, pioneer of humanitarian architecture and mentor to many, Ian has worked for more than forty years in Disaster Risk and Recovery Management as an academic teacher, researcher, NGO director and international consultant. He has authored, co-authored or edited 16 books including the first study of Shelter after Disaster in 1978.

Report Overview

The Purpose of the Forum	4
Introduction by Marta Fernández	5
Event Overview	6
Presentation Miguel Urquia UNHCR: Key Trends in Shelter and Settlement	8
Part 1 Collaborative Publications	13
Part 2 Research Collaborations	40
Part 3 Formalizing the DDD Network	41
Part 4 Where to next? Future Working Groups	42
Summary	43
Participating Institutions	45

Appendix 1: Agenda

Appendix 2: List of participating institutions and attendees

Appendix 3: Presentations of Panelists

The Purpose of the Forum

The number of people now displaced around the world, totals almost 100 million. This exceeds the total number of people ever displaced since World War II and, if counted as a nation, they would represent the world's 15th largest country. The intensity and protracted nature of conflict and natural disasters have doubled the number of displaced persons in the past two decades. In 2017, there were 30.6 million new displacements across 143 countries worldwide. This is 80,000 people a day or, on average, one person, every second, every day.

Despite the massive human and physical costs of these crises, government, community and development agencies often struggle to provide effective strategies to prevent or mitigate the impacts before conflict and disaster occur and to plan for long-term (re-settlement) and recovery afterwards. Many such challenges are strongly related to design issues. They are 'wicked problems' and require complex design thinking rather than narrowly focused, linear solutions. However, the skills of key design thinkers, such as architects, are seldom employed. As Brett Moore (Chief, Shelter Division, UNHCR) noted after Typhoon Yolanda in the Philippines: 'Despite the enormity of the disaster, it is

almost impossible to get trained architects or planners for the complex task ahead of rebuilding the shelters and settlements'.

Nonetheless, approaches that use design to address the complex challenges of disaster mitigation and recovery are emerging through the intersection of research and field practice. Examples include: landscape- and architecture-based strategies for reducing flood risks, design for climate change adaptation, settlement design for refugee encampments, and reconstruction of cities divided by ethnic conflict or recovering after natural disasters.

These examples provide the inspiration and direction for training a new generation of architects and related built environment professionals. Indeed, progressive Schools of Architecture, Design and Planning are now transforming their educational programs to address such pressing global issues. All the universities participating in this forum have such programs and have been meeting with each other since 2014 to share their plans and experiences with a view to program improvement. This forum provided another opportunity for the universities to meet. The chief goal was to explore ways in which the emergent network could be

strengthened through potential collaborative activities, e.g. through research, curriculum frameworks, publication and interaction with practitioners in the disaster and displacement organizations. This report synthesizes these discussions and the plans that were made.

The event was hosted by RMIT Europe and was planned by staff from the Master of Disaster, Design and Development at RMIT Melbourne in partnership with Aalto University, Helsinki, and UIC, Barcelona.

Prof Esther Charlesworth & Prof John Fien
School of Architecture & Urban Design
RMIT University

Organising Committee

Esther Charlesworth
John Fien
Carmen Mendoza
Saija Hollmen

Editorial Coordinator & Graphic Design

Sigrid Ehrmann

Design, Disaster and Development Research Forum 2

Introduction by Marta Fernández

According to the UNHCR, we are now witnessing the highest levels of displacement on record with an unprecedented 70.8 million forcibly displaced people worldwide. Climate change, military conflicts and economic crises are contributing to the acceleration of the global refugee crisis. The result is an increasing need to respond to the displacement and destruction of communities from both natural and man-made disasters, as well as a critical need to build the resilience of vulnerable communities in disaster-prone areas.

Design plays a key role to help resolve these complex global challenges and lies at the heart of RMIT's Master of Disaster, Design and Development, which was launched here at RMIT Europe in 2015. The Master course includes collaborations with our local partners, UN-Habitat and UIC Barcelona, as well as the International Federation of Red Cross and Red Crescent Societies (IFRC) and World Vision International. It forms part of the Urban Futures program, one of our focus areas at RMIT Europe, which aims to inform how cities can be more equitable, sustainable and accountable by providing integrated planning and design solutions for rapid population growth and urbanisation.

We are excited to welcome again the participants of this year's Disaster, Design and Development Research Forum, and to be part of this groundbreaking platform for professionals and academics working in the disaster and development sector.

Marta Fernández
Executive Director
RMIT Europe



Event Overview

The second edition of the *Design, Disaster and Development Research Forum – Learning from Urban Crises: 2019* took place from August 29 to 30 at RMIT Europe in the Barcelona district of Poblenou.

The forum, coordinated by RMIT University, UIC Barcelona and Aalto University, brought together leading built environment academics from universities across Europe to discuss how to deal with the pedagogic, spatial and research challenges of global mobility, migration and social inequality.

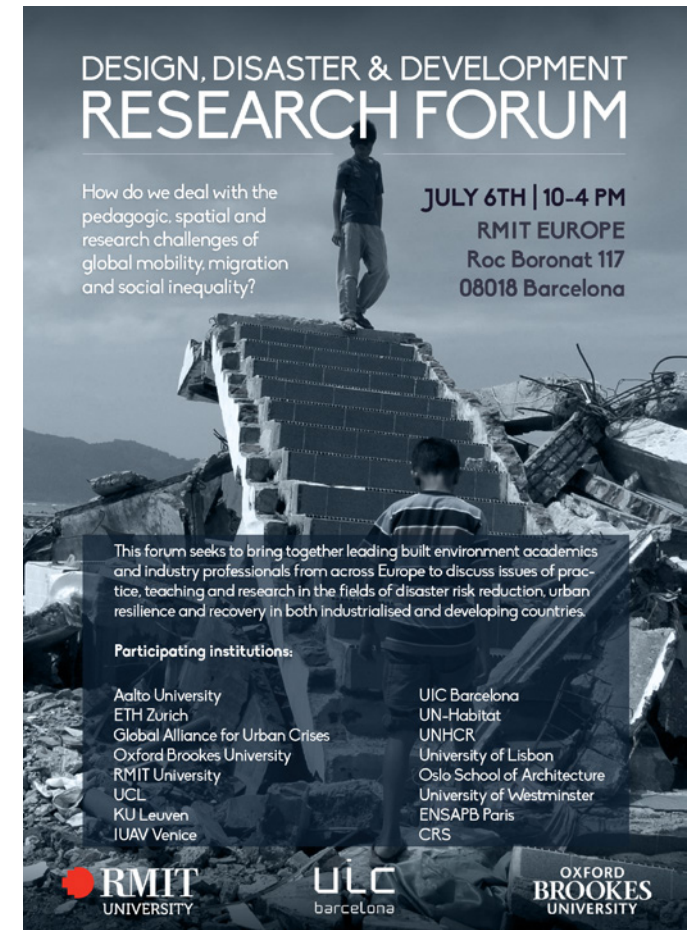
The event series was initiated following the 2016 symposium *Creation and Catastrophe* at the RIBA headquarters in London that called for a regular forum and platform for professionals and academics working in the disaster and development sector, with the first edition of the Design, Disaster & Development Research Forum held in July 2018.

One of the key objectives of this year's edition was the preparation of a book publication on how to respond to the challenges of training the next generation of professionals with specific understandings and capabilities to work in the disaster, displacement and development fields through design education. The participants of the research forum were

welcomed by RMIT Europe Executive Director Marta Fernández, followed by an introduction to the forum and the book project from Esther Charlesworth and John Fien. A guest presentation *Key Trends in Shelter and Settlement* was given by Miguel Urquía from UNHCR.

The panel presentations included pedagogical case studies from all participating universities. The thematic panels were followed by small group discussions and a plenary to explore proposals for further action.

The following report provides an overview of the presentations and discussions.



Poster of last year's event



Key Trends in Shelter and Settlement

Miguel Urquia

*Senior Emergency Shelter Coordinator and
Global Shelter Cluster Deputy Coordinator
UNCHR*

From the Global Shelter Cluster (GSC), we see the following trends currently shaping the humanitarian shelter response. The first three trends are a result of the *World Humanitarian Summit* which took place in May 2016 and the Grand Bargain.

Localisation

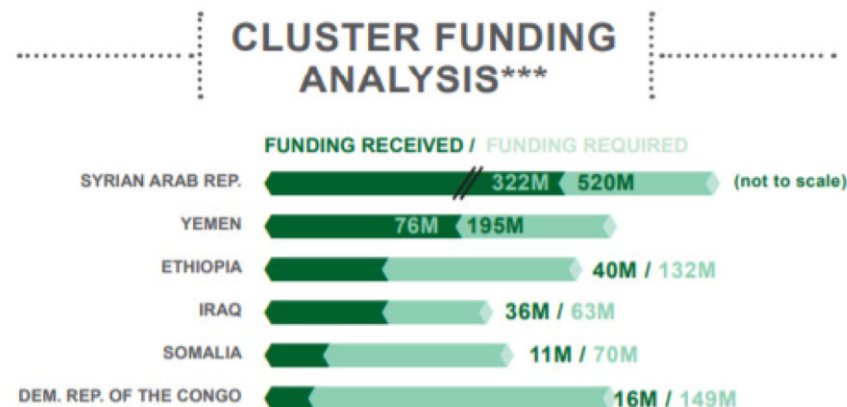
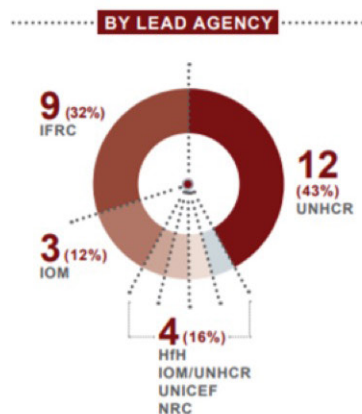
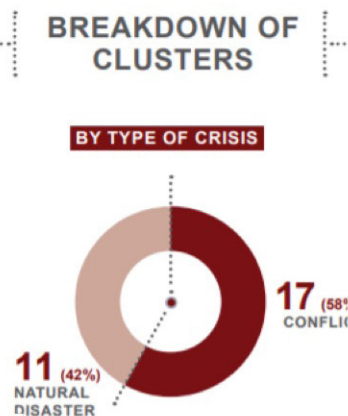
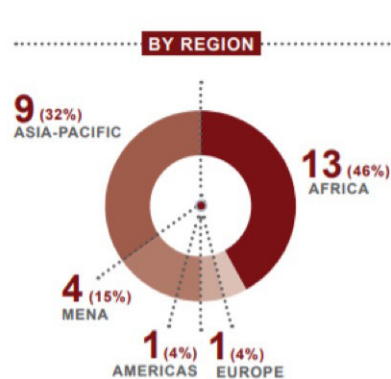
Based on the concept that the humanitarian response should be as local as possible and as international as needed, a number of organizations have committed to increasing the transfer of responsibility and power to local entities. UNHCR and WFP, for instance, have committed to implementing 25% of the funds they receive, directly through local organizations. Beyond the transfer of funds, the objective of the localization agenda is to promote greater representation and decision making by local stakeholders such as local, municipal, or national authorities, NGOs, private sector, and others. The GSC is implementing this by increasing the number of national staff in country-level shelter cluster coordination teams, translating key documents to national languages, putting in place sub-national coordination structures, giving more emphasis to the use of local materials and local building practices in responses, and by organizing preparedness

workshops. There are important training and research needs in these fields.

Participation Revolution

This is a renewed effort to put affected population at the driving seat of the humanitarian response. A fundamental shift should take place in the incentives that drive humanitarian action with a move from the current emphasis in donor reporting to real accountability to affected population. In the long-run humanitarians will move from delivering aid to becoming facilitators, catalyzers, advocates, and mobilizers of support. This is currently being implemented by setting up hotlines and other feedback tools, and increasing transparency in decision making and response. The GSC is advancing on this by promoting transparency, more involvement of the affected population, and greater gender balance in coordination teams which will facilitate communication with the most vulnerable affected population, typically women and girls. Through its Promoting Safer Building Working Group the GSC is also looking at ways to better supporting self-recovery. Finally, good practices are being captured in ways of increasing accountability to affected population. More research will be needed on the effectiveness of these

Key Trends in Shelter and Settlement



Key Trends in Shelter and Settlement

practices and once this effectiveness is demonstrated there will be a need to train shelter practitioners and coordinators on these practices.

Cash

The use of cash is not new in the Shelter sector, restricted cash (i.e. vouchers) and conditional cash have been utilized frequently in the past. The Grand Bargain calls for an increase in the use of cash including unconditional cash also known as multipurpose cash grants. This is done

with the objective of promoting more dignified responses that enable recipients of aid to make their own choices on the use of the funding. There is also a belief that cash responses will be more efficient than in-kind. Some organizations have committed to doubling the amount of funds implemented through cash by 2020. The GSC is developing guidance, tools and training on the use of cash. The GSC would like to undertake research to understand the balance between effectiveness and efficiency in cash responses, or ultimately, understand

the quality of shelter outcomes in responses that use unconditional grants. There is a need for training practitioners in monitoring of cash responses and in the use of more sophisticated financial mechanisms such as loans, mortgages, and others.

Urban

With the increase in urbanization, humanitarian responses in urban settings are already becoming more and more common. Urban contexts challenge the traditional humanitarian response methodologies. In these contexts, responses need to be multi-sectoral, involve a greater diversity of partners, and include humanitarian and development aspects. Humanitarians need to work more closely with local authorities, private sector, and other stakeholders.

Responses are also more complex in terms of design (neighborhoods, multistory buildings), materials, tenure, and infrastructure. The population of concern is less visible as they live dispersed in the city among many other people which also often need to be taken into account. Area-based approaches and coordination in urban settings are fields in which the GSC is investing efforts although more research and training are needed.



Key Trends in Shelter and Settlement

Other issues: Evidence-based response and specialization of the sector

Data is becoming a greater component of the humanitarian work. There is a growing expectation that needs are clearly and objectively measured and prioritized and that responses are accurately monitored to identify and report gaps and avoid duplications. In order to do this, strong information systems need to be put in place that allow intra and cross sectoral analyses of large amounts of data. There is also an expectation that impact of responses are demonstrated using objective data. While this may be possible in medical or clinical environments, it is very challenging for the humanitarian shelter sector. There is a need to demonstrate the cross-sectoral impact of shelter/housing, how it not only saves lives but also protects and provides a bedrock for livelihoods, health, education, and other areas.

As the shelter sector becomes better understood, more specialized roles or areas of work are being defined. The classical roles of shelter officer, settlement planner, and shelter coordinator remain very much in demand but other roles are being added such as Information Manager, Technical Coordinator, Cash advisor, HLP advisor, urban advisor,

and others. These new roles will likely need to be further broken down in other sub-roles as these areas become better defined. This greater understanding of the wider shelter panorama opens opportunities for more specialized research and training.

Activity proposals and Working Groups in the GSC

The GSC is a platform that facilitates the engagement of stakeholders to improve shelter responses. One of the ways to achieve this is through the creation of time-bound output-oriented Working Groups (WG) to address a particular issue. Research and capacity building is a key component of the GSC Strategy 2018-2022. A WG could be created to address concrete issues related to Research and capacity building involving academia. Some of the issues that could be included in this WG include the mapping of existing academic courses related to the Shelter and Settlement sector, as well as the identification, prioritization, and formulation of key research questions for the sector that could guide academic research.

The process for the creation of a WG is the following:

- An activity proposal is drafted by at least two partners and presented to the GSC Strategic Advisory Group (SAG) which decides whether it is of interest to the GSC. The activity proposal should identify concrete outputs of the WG as well as resources already available and others that are still needed.
- If the SAG considers that the activity proposal is addressing an important component of the strategy and therefore it is interesting for the GSC, a WG will be created and a global update will be sent to all cluster partners inviting those interested to participate in the WG to contact the WG chairs. Partners will also be invited to contribute to the resources that are still needed.
- Once the WG is formed, it will meet regularly to achieve the activities indicated in the activity proposal and to report to the GSC SAG. Once the activities are fully achieved, the WG disbands.



Part 1 | Collaborative Publications

Introduction

John Fien | RMIT University

Presenters

Saija Hollmen & Matleena Muhonen |
Aalto University

Kelly Shannon & Bruno de Meulder |
KU Leuven

Esther Charlesworth & John Fien |
RMIT University

Tony Lloyd Jones | University of Westminster

Camillo Boano | University College London

**Carmen Mendoza Arroyo & Raquel
Colacios** | UIC Barcelona

Cyrille Hanappe | ENSAPB Paris-Belleville

Camillo Magni | Politecnico di Milano

Kristjana Adalgeirsdóttir & Diego Vega |
HUMLOG Institute, Hanken School of
Economics

Michele di Marco | Università Iuav di Venezia

Introduction

The first possible area of network collaboration to be discussed concerned collaborative publications. The 2018 Forum addressed the question of “How do we deal with the pedagogic, spatial and research challenges of global mobility, migration and social inequality?” It explored the challenges of how to train the next generation of professionals with specific understandings and capabilities to work in the displacement, disaster and development fields.

As the report of last year’s symposium showed, all the participating universities teach successful masters programs that use design to prepare the next generation of professionals wishing to work in these fields. Indeed, the aim of the 2018 was to share details of the aims, curriculum structure, teaching approaches and student outcomes of the masters programs. The report of the 2018 Forum may be found at URL <<https://harbureau.org/#events>>

One of the conclusions of the 2018 Forum was that the 2018 presentations could form the basis of case study chapters in a book. The 2019 Forum asked participating universities to extend the 2018 case studies

with a focus on the range of pedagogical approaches used in the masters programs and to illustrate these with accounts of student learning experiences.

Such a book of case studies would provide examples that, when analyzed and lessons learnt identified, could be used by other Schools of Architecture, Design and Planning to plan degree programs that respond to the global crises of disasters, displacement and development through design-based approaches.

This section of the report presents a summary of the pedagogical case studies presented by the participants in the Forum. These summaries are followed by a review of the discussions that followed and decisions about further network collaboration, perhaps in the form of a book of the linked case studies from the forums in 2018 and 2019.

Aalto University | Aalto WitLAB (World in Transition)

World in Transition (WiT) Minor is an Aalto University-wide interdisciplinary elective ensemble focusing on humanitarian development, open for all Aalto master level students. The minor includes theoretical background studies in state of the world and development as well as interdisciplinary co-learning studio courses with field trips to partnering southern countries, preparing the students for real life challenges in vulnerable communities. It deals with cross-cultural communication, participatory practices and community engagement in vulnerable settings, and promotes culturally sensitive professional practices in architecture, design, engineering and business. The minor is co-hosted by Aalto University's Department of Architecture and Department of Built Environment.

The focus of WiT Minor is in long-term sustainable global development issues, such as UN's SDGs, good governance, human rights, social sustainability, climate change and innovations, with capacity building in the partnering southern institutions as a strategic aim.

Pedagogical principles

WiT Minor exploits Problem Based Learning (PBL) and Human-Centered Design (HCD) methodologies with links to industry, civil society and academia, aiming at providing the students with a holistic understanding of the global development related issues, regardless of their own disciplinary background. Developing transferable skills is an important aim when preparing for advanced studies and further work life opportunities on the field.

Case Study 1 Zanzibar

Improving the urban conditions in the Ng'ambo area within Zanzibar city. The field trip to Zanzibar in January 2018 was organized in collaboration with the Aalto Department of Architecture and Zanzibar Department of Urban and Rural Planning of Zanzibar. The 13 Aalto students, with backgrounds in architecture and business, spent three weeks studying the area of Ng'ambo, the densely populated area next to

THE GREEN NETWORK SCALES OF INTERACTION URBAN SCALE



Connectivity into Ng'ambo



Public spaces in the neighborhoods

DETAIL SCALE



Nodes - places and activities



Detail - greenery and furniture

Aalto University | Aalto WitLAB (World in Transition)

the historical city centre, Stone Town. As the capital city grows faster in population than ever before and becomes increasingly more urbanised, Ng'ambo will be developed into a new center for the city of Zanzibar.

The assignments addressed flooding and resilience, housing and public buildings, green infrastructure and community engagement through built environment. The Aalto students worked with the city planning office team and some students from the State University of Zanzibar (SUZA), to access local communities and gather information on site. The shared footwork served as a common basis, and all individual projects remained connected to the overall scheme. Collaboration with SUZA and local organizations served to provide valuable insights.

As a result of intense group-work and collaboration, the 13 students built a joint endeavour where all the projects interlink and intertwine, and collected their learnings and presentations in a course publication, "The Other Side". The book presents suggestions to improve the urban conditions in the Ng'ambo area within Zanzibar City.

In preparing for the studio course, students

attended the same background studies as described in the Case Study 2. The field trip provided an essential cultural experience and mutual learning opportunities. The actual design work took place after the field trip. The studio included mid reviews, final exhibition and drafting of the joint publication.

Case Study 2 Nepal

Building disaster resilience through communal synergies

This case study was one of the four student cases in 2019 at the Sustainable Global Technologies (SGT) Studio course hosted by the School of Engineering, Aalto University. A multidisciplinary team of seven masters-level students from Aalto worked with five peers from the Nepalese university, conducting fieldwork in the village of Dhungentar, aiming to research the local communality. Arising several questions, an important one was about the relationship between how social cohesion could contribute to sustainable reconstruction after disasters. Students came from several study fields; Collaborative and Industrial Design, Business, Civil, Environmental and Electrical Engineering, Design, Biotechnology and Hotel Management.



SGT Course Structure and Main Tasks

Background Study

- Literature review and background study covering economic, environmental, social, geographical, cultural and political situation.
- Project design workshops to formulate objectives for a development project and understand the project logic.
- Comprehensive written project document as a working plan for the team and partners.
- Project Clinic for peer-review where different Aalto teams and faculty review and comment each other's work.

Field Study (3 weeks)

- Observation and data collection
- Community involvement, interviews and observation to collect insights
- Expert & stakeholder meetings
- Daily personal reflections diary to help follow own thinking and learning process
- Documenting and photo exhibition in the village
- Presentation at the local university

Mid-Review

- Pecha-Kucha style presentation to

summarize field study experience and results.

- Project Clinic for peer-review where different Aalto teams and faculty review and comment each other's work.

Reporting

- Media release for wider communication
- Written report
- Public presentation

Throughout the course, students were writing personal weekly reflections diary, organizing relevant expert meetings, meeting with their own mentor and having their own team

meetings. They also used their own website, www.nepali.fi, as a tool to communicate their project further. The final report is accessible through the website. Duration of the course was five months.

This case study is part of PBL South Asia project aiming to develop best practices in problem-based education as a joint initiative between ten universities that are located in Finland, India, Nepal, Bhutan, the Netherlands and Lithuania. The next student case will be located in Bhutan in 2020 where learnings from the Nepal pilot case will be tested again and developed further.



© Carlos Martinez

KU Leuven | Master of Human Settlements & Master of Strategic Spatial Planning

The *International Center of Urbanism (ICoU)* focuses on the most pressing contemporary issues at stake in settlements and environments across the globe. Urbanization continues to gallop ahead in most parts of the world, while massive restructuring is clearly necessary in post-industrial societies. At the same time, business as usual is challenged by unprecedented migration of humans and species and the consequences of climate change.

Education

There are two post-graduate programs offered by the ICoU. The Master of Human Settlement (MaHS) is a 2 semester, 60-credit course and the Master of Urbanism and Strategic Planning (MaUSP) is a 4-semester, 120-credit course. The programs are taught by KU Leuven faculty engaged in the research groups OSA/RUA (research group urbanism and architecture) and P&D (Planning and Development) as well as a host of international guests. The post-graduate programs run in parallel with elaborate doctoral programs in urbanism, landscape and planning.

The *Master of Human Settlements* addresses rapid urbanisation in the developing world

and contemporary urban transformations. Architecture, urbanism, landscape architecture and spatial planning are the core disciplines underpinning the programme. Contributions from economics, geography and anthropology, among others, complement the core, to better understand the interplay of human and natural ecosystems. The programme thrives from its truly international body of students and the faculty's long-standing research expertise in worldwide contexts.

The *Master of Urbanism and Strategic Planning* focuses on multi-faceted and -scalar issues of contemporary urban development. The course develops a critical understanding of the contemporary conditions of settlements, cities and urban regions. It introduces students to innovative concepts and strategies for qualitative interventions in urban territories through projects, plans and policies across different scales. The course offers three possible specializations: urbanism, planning or landscape.

In the KU Leuven spring of 2018, three studios, on three continents focused on design responses to climate change, including water and forest urbanisms and

the development of new morphologies and typologies to create new relationships between nature and culture, water/ agriculture /forests and cities, the unbuilt and the built and public and private realms.

Urbanized deltas are amongst the earth's most inherently vulnerable territories with regards to climate change and man has yet to figure out how to appropriately respond to the predicted consequences.

KU Leuven Spring Semester Studio Climate Change & Contemporary Landscape Urbanism Strategies

The studios overlapped and shared as many resources as possible. Each studio developed a collective vision for the near and long-term futures and thereafter individual projects, across a transect of the delta (and across scales), will be developed to strengthen the vision and more specifically create soft infrastructure strategies to respond to sea level rise and storm surge, the relation of the urban and the rural, hybrid morphologies and typologies of housing, social and private buildings in relation to productive landscapes.

Case Study 1: Yangtze River Delta, China

The transect is 140 km x 10 km, located in the Taihu Basin of the Yangtze River Delta. The vision is premised on rebalancing ecology and creating new landscape structures to both adapt to climate change and frame future urbanization. Across the transect, new landscape and settlement morphologies/typologies are developed. Two distinct water landscapes frame the transect. Taihu Lake in the west supplies drinking water and Pudong Coast is in the east. Between is a continuous, non-hierarchical pattern of urbanization which includes Suzhou, an ancient water town of 10 million inhabitants, and Shanghai, a metropole of 24 million inhabitants. While the coast has to cope with sea level rise (1 meter by 2050), Taihu Lake suffers from issues related to water quality and quantity. Learning from indigenous techniques for floodwater management, there is the opportunity to move away from flood control towards controlled flooding. Suzhou Creek is requalified to become the territory's primary spine which, in turn, restructures open and built space. It is reestablished as the lifeline, literally and figuratively of Taihu Basin. It is a linear ecological threshold which is conceptually elastic in that it contains a sequence of productive, performative and recreational landscapes. Orchards mark

an expanded public realm and reveal its continuity. The new hybridized, elastic water spine frames strategic densification. Within the logic of constructing a New Socialist Countryside, a territory of new nature is established to simultaneously absorb flood waters and future population growth (within new hybrid, medium-rise, high-density zero-carbon typologies).



Case Study 2: Guayas River Delta, Ecuador

The transect crosses three major environments in the Guayas River Basin and runs from an estuarine complex (south) to a sweet water basin (north). These landscapes have been the object of exploitative monofunctional practices (shrimp farming, urbanisation and intensive cash crop agriculture) that have distorted the dynamics of the original ecosystems of mangroves, marshlands and tropical forests. Future urbanisation rates will increase the pressure on the environment, making water scarcity and food security serious issues. Climate change will only exacerbate the situation. Guayaquil recurrently experienced the immediate consequences of the shifting climate and is considered one of the world's coastal cities at highest risk of damaging floods due to climate change. How can the Guayas Basin prepare for changing conditions of extreme heat, increased precipitation and sea level rise? The transect vision proposes the recovery of original landscape logics by rebalancing the interplay of landscape, settlement and infrastructure in four 5x5km sites. Within these squares, thirteen strategic urban projects tackle the following issues: The afforestation of monofunctional landscapes and productive environments to allow

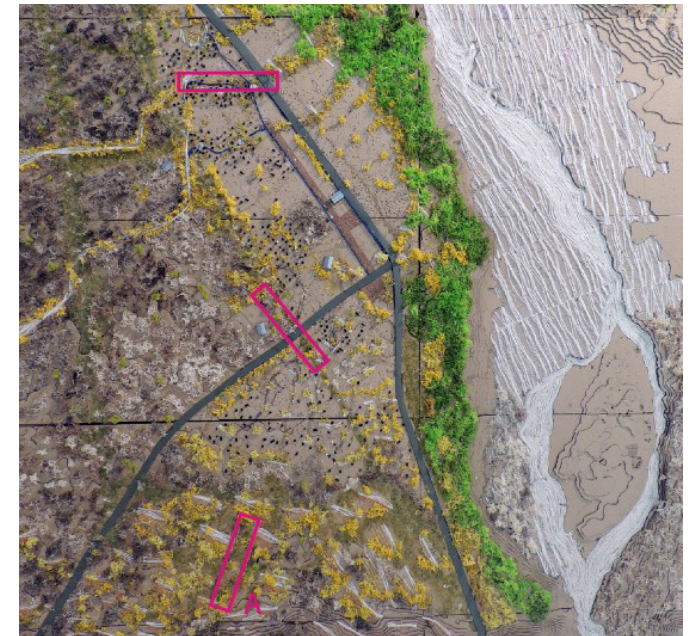
local economies and livelihoods to thrive, proposed topographical manipulations to create more space for water to flow, to be harvested, collected and cleaned, diversified open (public) space and built typologies that respond to the range of specific water-related problems (e.g. surface flooding, water logging, pollution) and reduce urban heat island effects, and alternative social-spatial organizations in which ongoing dynamics can be incorporated to constructively support ecological cycles for the waves of urban development to come.



Case Study 3: Zambeze River Delta, Mozambique

This landscape urbanism studio investigated a transect (140 X 10 km) of the Zambeze river basin between two of its main tributaries (Luenha and Revubue). The thinly forested savannah fastly arrives at a turning point due to the recent coal mining (in the twin-municipalities Tete and Moatize) that also catalyzed fast urbanization. Catastrophic deforestation, massive erosion, water pollution as well as shortage exhaust the self renewing capacity of the environment, while the local population is highly dependent on the resources embedded within the landscape. The design investigates strategies of leapfrogging the ongoing consumption and destruction of the landscape with new (and sometimes age-old) mechanisms of landscape and resource creation. Water is fundamental in this transformation: from a concentrated resource available during short periods of time and coming down the slopes with brutal force, washing away the soil, a series of interventions hold and spread the water over the landscape from the mountainous areas towards the rivers. The landscape is irrigated allowing self-reconstruction. Planting strategies fix eroded gorges and turn them into domesticated land.

Along the gradient of wetness and slopes, different ecologies appear and economies can emerge. As such forms of living within the resourceful landscape are re-established that can counter the current unsustainable concentration of settlements on slopes next to rivers or the fragmentation of private domains on the infertile plateaus. The range of vegetation reinvigorates the lifestyle of living under the canopy of a variety of trees that offer a wide range of uses.



RMIT University | Master of Disaster, Design and Development (MoDDD)

Overview of the Program

The Master of Disaster, Design and Development at RMIT University, Australia, is a mid-career professional development program for people who wish to transition their careers into the disaster and displacement sectors. This involves positions in climate change adaptation, emergency management, disaster recovery and reconstruction. It also involves positions in the humanitarian and development sectors serving people displaced by conflict and disasters.

The degree program began in 2016 and has so far graduated over 20 professionals who have gone on to positions with the World Bank, UNHCR, various emergency service departments, local government, development agencies such as World Vision and Oxfam, or PhD research. The degree is taught predominantly online with students able to interact in weekly webinars and twice-yearly intensive workshops.

Pedagogical Principles

The underlying philosophy of the program is systemic design (an integration of systems and design thinking), which is used as a process for understanding issues and solving problems in the complex and dynamic

fields of disasters and displacement. This means that the program is interdisciplinary and involves courses not just from design and architecture but also communications, social science, law, development studies and environmental management. There is a strong emphasis on the promotion of research and operational skills for future employment. Thus, there is regular and intensive interaction with industry professionals through webinars, the intensive workshops, internships and the capstone industry research project that students undertake as their final course.

Case Study

These pedagogical principles are illustrated in an international design studio in Hoi An, Vietnam, which is the field component of a semester-long course on Climate Change, Design and Development.

The objectives of the course are to:

- Synthesise knowledge from a variety of scientific and community-based sources on climate change, and the links between climate change and disasters.
- Discuss the key strategies of climate change adaptation and disaster risk reduction, and their differences and convergences.
- Interpret and analyse the implications of climate change and disasters for the built environment, in parts of the Asia-Pacific region, from diverse perspectives and sectoral linkages.
- Work effectively with others in a field-based situation and demonstrate social, cultural and environmental awareness.
- Communicate using diverse formats and strategies to engage with a range of stakeholders.





Figure 11: Issues identified along the transect corridor.

There were two parts to the course. Part 1 explores key concepts and trends in climate change and strategies for adaptation through a set of online materials, webinars and workshop assignments. Part 2 involves a design studio on Adaptation Pathways Planning for climate resilience. The case study focuses on the design studio.

Ten masters-level students participated in the Design Studio. They were a cross-disciplinary group of architects, landscape architects, urban designers, planners and built environment professionals as well as people with backgrounds in journalism, marketing and creative arts.

The studio built upon the online studies in Part 1, and involved the following sequence of activities:

Site familiarization

- An annotated mapping and photographic exercise
- Hội An culture heritage
- Demographic and economic change in Hội An and surrounds

Lectures & workshops

- Climate change science and impacts in Vietnam
- Flood risk and scenarios for Hội An region
- Resilience Index research in Hội An
- World Heritage values in Hội An and climate change threats to, and impacts on, heritage values
- Adaptation Pathways Planning

Field research

- Coastal and wetland vulnerability analysis
- Typhoon resistant housing

Data analysis & reporting

- Situational Analysis
- Vulnerability mapping and analysis
- Adaptation Pathways Planning
- Presentation preparation and report writing

RMIT University | Master of Disaster, Design and Development (MoDDD)

A summary of the report was presented to a workshop attended by Hội An City and Quảng Nam Province officers and community representatives. These stakeholders recognized the value of the report but were also able to identify ways in which it could be greatly improved and, moreover, useful, in the future.

This advice included working with the stakeholder group more closely and focusing on adaptation needs in additional parts of the region. In addition, they offered to provide support to study additional issues in future design studies, e.g. quantitative data on mangrove restoration schemes and construction density policies, building regulations, economic vs. human losses from flooding in Hội An, and social vulnerability. This advice is being integrated into the 2020 design studio.

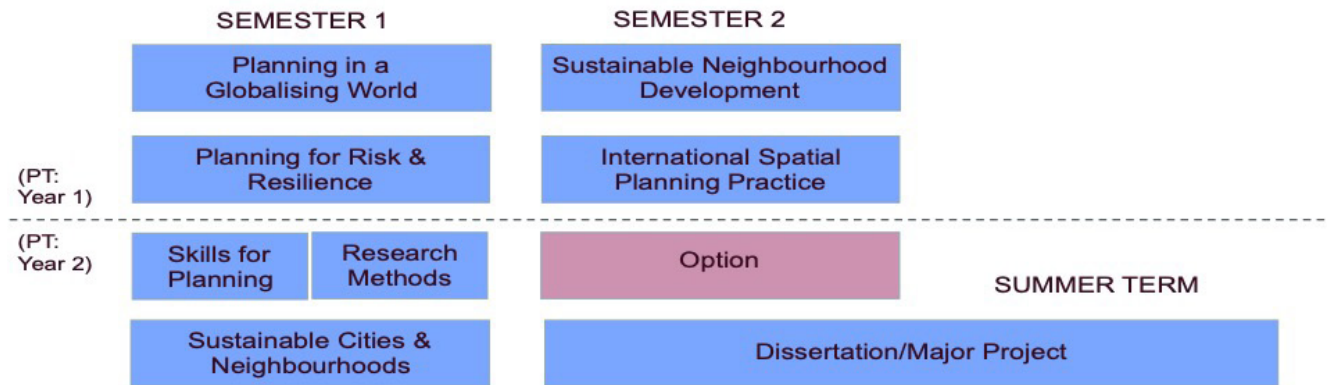


University of Westminster | MA International Planning and Sustainable Development

The MA International Planning and Sustainable Development programme, now in its eleventh year, is delivered face-to-face: in 1-year full time and in 2-year part-time modes. It is mainly for full-time international, UK and EU students, but open to part-time UK-based students who want to explore an international development and sustainability planning career pathway. It attracts mainly built environment professionals but also others with varying disciplinary backgrounds wishing to pursue a planning or development-related career in international practice and/or the UK.

The MA is accredited by the Royal Town Planning Institute (RTPI) as a 'combined planning programme'. The programme offers Urban Resilience and Spatial Planning Pathways to the award. Numbers are on an upward trend – 20-25, mainly full time student – with the majority now taking the Urban Resilience Pathway. Diversity is a strong feature with more than 60 countries having been represented on the course and a majority of female students.

The course has a modular structure with modules typically of 20 credits, and 360 credits required for the Masters award.



Structure of the Urban Resilience Pathway

Key pedagogical principles and strategies of the program

The course explores contemporary theories, public policy and practice in planning for resilient and sustainable development in cities, regions and communities in a rapidly urbanising world. It spans both developed and developing world contexts, in locations facing a wide range of growing climate change and other environmental, economic and social risks. It adopts a social-spatial perspective – from strategic spatial governance at the city region scale to local community-led interventions informed by appropriate planning and urban design interventions.

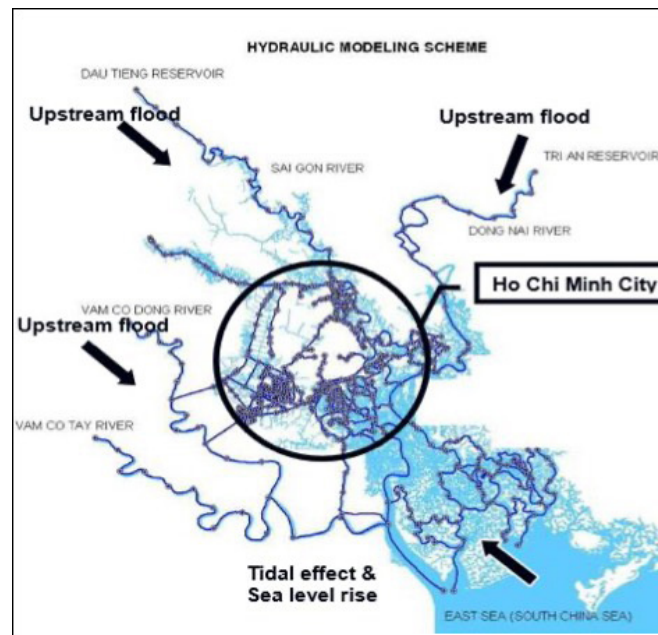
The Urban Resilience Pathway was established in 2014 and provides a sustainability and resilience-focused route with a core emphasis on managing climate change risks, environmental hazards and adaptation planning. It focuses on systematic and local action-based risk management for cities and regions and responds to the need to identify viable and affordable options for risk reduction and resilience, with a particular focus on vulnerable groups and risk to social infrastructure/livelihoods and economic activity.

Participants learn the key vocabulary and frameworks for understanding disaster management, risk and resilience strategies and how to explore viable options within a studio setting. They work in small groups on a design exercise where they explore a specific context in detail and develop options alongside strategies to deliver these. The wider teaching and learning strategy involves theoretical papers, presentations and directed reading. Participants reflect in peer-to-peer class discussions on the significance of risk and resilience within their practicing environment.

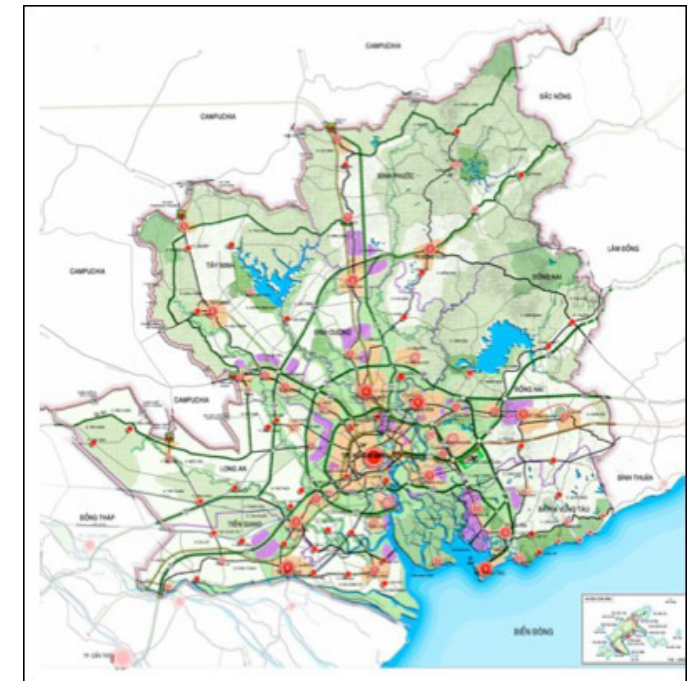
Case Studies

Planning for Urban Risk and Resilience Studio: Climate change risk management in Ho Chi Minh City, Vietnam

Ho Chi Minh City is a major urban agglomeration that makes significant contributions to the economy of Vietnam and its people. It is exposed to multiple hazards, particularly water-related, and increasingly at risk from climate change. It has proven an excellent case study for design work that addresses issues related to disasters, internal displacement and design.



During Semester 1, students go through 5-6 weeks of studio sessions in small groups where they apply their understanding of resilience frameworks to come up with options that are viable to reduce risk and enhance resilience for the vulnerable communities and at risk businesses. The student assignment informs is informed by data is drawn from a recent Doctoral study on flood risk and management issues in Ho Chi Minh City.



University College London | MSc Building and Urban Design in Development

Overview of the Program

The BUDD MSc at the Bartlett Development Planning Unit, UCL is a post graduate program open for graduates and professionals interested in the theory and practice of urban design and its role in building just cities and communities with a special focus on the Global South. The degree program begun in 1982 with an earlier focus on Housing and Land evolving constantly till now to the current form with a holistic view development of urban areas a political and economic perspective of space in the Global South. Disaster and conflicts are substantial part of the curriculum and the pedagogical practice and case-based practice exercise though they do not constitute always a stand-alone module. This is the case for the optional modules: Housing as Urbanism: Housing Policies and the Search for Scale; Housing Policies: Practical Dimensions and Alternative Options; Disaster Risk Reduction in Cities; Post Disaster Recovery: Policies, Practices and Alternatives; Adapting Cities to Climate Change in the Global South; Health, Social Justice and the City. The degree is taught in 12 months intense full-time way (with a part time option) with student engaging in lectures, linked exercises and studio works, critical participatory, community-based exercises, overseas field trips (co-produced

design research engaging with local realities and, in the summer term a individual research dissertation.

Pedagogical Principles

The underlying philosophy of the program is a sort of critical theory inspired design research, which is used as a process investigate, diagnose and creatively develop urban just strategies away of the simplistic problem solving. In this theory and practice are not separated but rather are dialectically constructed as theory-practice relations that, in the different element of the courses are developed for experimenting practicable strategies. Our pedagogical strategy pushes to 'operationalize' critical theory in myriad ways but particularly we use the 'research based design' method to question both theoretical debates but also the grounded potential of particular spaces and push to stir the imagination of the spatial agency that lies in each locality and the constellation of actors that shape it. In that line, our core definition of urban space refers to theoretical foundations of the social production of space and the intertwined interactions between space, knowledge and power that serve also as basis to frame the political economy of space. Embracing the political economy and ecology of the production of space

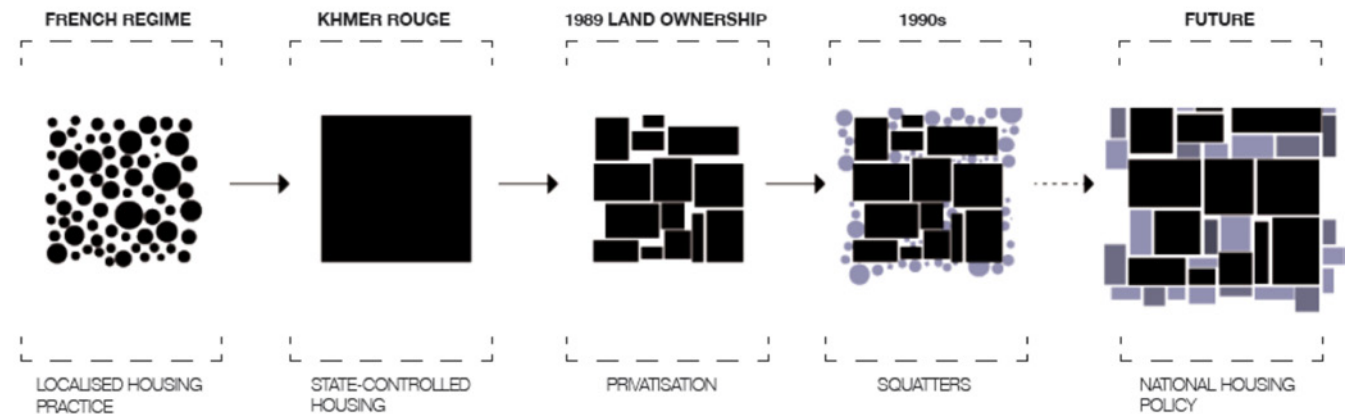
imply the abandonment of the simple morphological analysis of urban space proper of the conventional trajectory of urban design. In BUDD urban design is treated, conceptualised and predicated as an expanded field where tools, approaches, and modes of operations are contested and reframed. However, each part of the course is immersed in the physical dimension of space as manifestation, real and imagined, of the conditions that made such manifestation possible at different scales. The physicality of the city therefore is both the starting point (but included in a web of other social, political and economic elements) as well as the outcome in the form of a design proposition (along policy strategies and socio spatial trajectories).

Case Study

These pedagogical principles are illustrated in an international design fieldtrip in Yangon, Myanmar (with some references to previous one in Bangkok and in Phnom Penh).

Building on a DPU long-term tradition, the international field trip epitomizes the connections between different communities to enhance learning processes by connecting teaching, research and 'real world' communities (Fung, 2017).

A BUDD field trips an embodied experience for knowledge coproduction. Field trips are meant not only to galvanise the linkages between theory and practice, to grasp grounded applications of abstract concepts and develop interpersonal skills but also a subject of critical thinking and a sequence of subjective encounters (Patel, 2015). In this context, the aim of the Field Trip Project is to research collaborative people-centred partnerships for citywide upgrading in Myanmar. The field trip will serve as an interactive setting to expand action based design skills while contributing to an on-going grounded work of local community led organisations. The enquiry for framing innovative and critical spatial strategies will focus on the transition and rapid change of



the country's contested urban conditions. Thus, the broader purpose of the field trip is deepening the abilities to identify and trigger potential spaces of opportunities toward a just and inclusive socio-spatial transformation.

The field trip project is based on the incremental learning of the module contents. On the one hand, the field trip project is grounded on the research design method learnt in the urban intervention studio, where the comparative urban design approach contributed to uncover the differential trajectories of spa-

tial transformation, discover interconnected urban challenges and dismantle preconceptions about how urban interventions can be shaped. Thus, this project seeks to prepare a systematic yet flexible engagement for knowledge co-production with our partners and the local communities we will work with on the focus mentioned above.

We aim to keep building an overall understanding of the processes of citywide upgrading in the context of South East Asian cities building on a long-term partnership between

University College London | MSc Building and Urban Design in Development

The Bartlett DPU and the Asian Coalition for Housing Rights (ACHR). Our field trip will serve to catalyse networks with other relevant actors influencing Myanmar's urban development. This partnership involves directly the Community Architects Network (CAN), a programme funded by ACHR that operates in the region) and a local anchor organisation, Women for the World (WFW) and the Community Bitukar Platform (CBP) recently founded. We will be also working with the Yangon Technological University (YTU), the Association of Myanmar Architects (AMA), and the Yangon Heritage Trust (YHT). In doing so, we want to grasp the complexities and contradictions of urban development of poor settlements and to enable a critical reflection on the agency of design and space, while questioning the role of the practitioner in the whole process.

The guiding overarching design based research questions will be: What configurations of land, citizenship, finance and heritage contribute to the production of the urban space in Yangon? As a consequence, How to frame spatial strategies for city-wide upgrading?

The field trip also seeks to develop a multi-scalar analytical framework. While constantly referring to the citywide approach, a

specific part of the project will concentrate on four grounds of investigation¹ selected by our partners according to their peculiar challenges and needs. The specific sites involve communities that have entered (or are in the process of entering) in the network of WFW,

a network of women who save money and make decisions for their communities collectively. Organising saving groups is a pre-condition to access funds from the Asian Coalition for Community Action (ACCA) programme or other sources.



UIC Barcelona | Master of International Cooperation Sustainable Emergency Architecture

Overview of the Program

The Master of International Cooperation Sustainable Emergency Architecture is an official 60 ECTS one-year MSc degree that prepares architects and professionals from the built environment to develop and rebuild communities affected by rapid urbanization, poverty, conflict and natural disasters. The program forms part of the Erasmus Mundus European Cooperation Program and is located in Barcelona at the Universitat Internacional de Catalunya (UIC).

The Master delves into the main topics: sustainable urban development, emergency architecture and community resilience. It includes courses with a multidisciplinary approach to urban and architectural strategies that promote social cohesion. Students will acquire the proper skills to develop a critical analysis and management capacity of complex problems in a variety of contexts, learn to maximize human resources to support local actors in post-disaster and post-conflict scenarios and tackle urban upgrading strategies in both developed and developing countries. Students will also obtain a certificate from our partner organization IFRC through the 'Humanitarian Shelter and Settlement' course.

Pedagogical Principles

It is essential to understand the physical, social and cultural substrate of the cities or territories in which we are going to intervene as well as analyse the context at all scales throughout the intervention process in order to establish a critical approach and proposals in accordance with their urban legacies. The programme includes courses that will help implement and complete this necessary multidisciplinary approach with alternative planning, urban and architectural strategies that promote social cohesion.

Case Study Socio-Spatial strategies for urban regeneration

This workshop provides the student with the necessary methodological foundation in order to intervene with a holistic and interdisciplinary vision in international cooperation projects at an urban and architectural scale. The program's inter-scalar approach strives to build alternative upgrading, regulatory and development strategies both at an urban and building scale. The methodologies will also focus on building technologies that incorporate mixed use programs with techniques and materials derived from local cultures. The students are



introduced to and apply a method through real projects of how to tackle post disaster and urban integration strategies for refugees.

These pedagogical principles are illustrated in the Master in both a local and an international hands-on workshop during the academic year. The 'International Regeneration Workshop' has been developing these principles both with interventions in post-disaster reconstruction and in the past workshop on urban integration strategies for refugees. The workshop are always coordinated with local authorities, NGO's and if possible local universities, and it is a real ongoing project to which we contribute to.

The intent of the workshop is to enable students to learn how to:

- Perform effectively in a team situation
- Develop appropriate written and oral communication skills for addressing community members' concerns
- Work with urban and architectural methodologies/tools to target different needs felt by diverse social groups, and apply practical skills and knowledge learned elsewhere in the curriculum
- Learn to act ethically while maintaining a

balance between independent and critical professional work and responsiveness to the partners in the project

- Build the capacity of the community members to carry out small and strategic urban and architectural betterment projects
- Ensure that all work developed respects and responds to ongoing urban betterment initiatives
- Develop and work on site on a specific betterment action of the area of study

Methodology

Our objective is to develop an integrated (from void to urban fabric) and social diagnosis in order to deliver specific regenerative proposals for the site.

The methodological process will follow three steps:

Step 1 - Initial physical assessment online

Identify what conditions should be reinforced and bettered after reviewing the plans developed by the local and partner institutions, and visit the intervention site.

Step 2 - Social approaches

Incorporate the results and recommendations already developed by the local institutions and collaborators regarding the community's perception. Conduct semi-structured interviews with local stakeholders and existing NGO's as well as locals of the area to identify their needs and perceptions of the site.

Step 3 - Socio-spatial integration of the data collected and strategic proposals

Assess the information regarding each topic in order to develop specific proposals which bridge the physical and socially based findings.



Accommodation

Most are struggling with flatmates and shortage of furniture and house equipment.



Neighbors

The people don't have problem with their neighbors and they have nice relationship with them.



Healthcare

When asking about healthcare system, most said that is no adequate healthcare systems.



Belonging

Most do not feel sense of belonging yet, as most are not learning the language and planning to move in the future.



Individuality

Most are not happy with a system that does not recognise their skills and expertise.

UIC Barcelona | Master of International Cooperation Sustainable Emergency Architecture

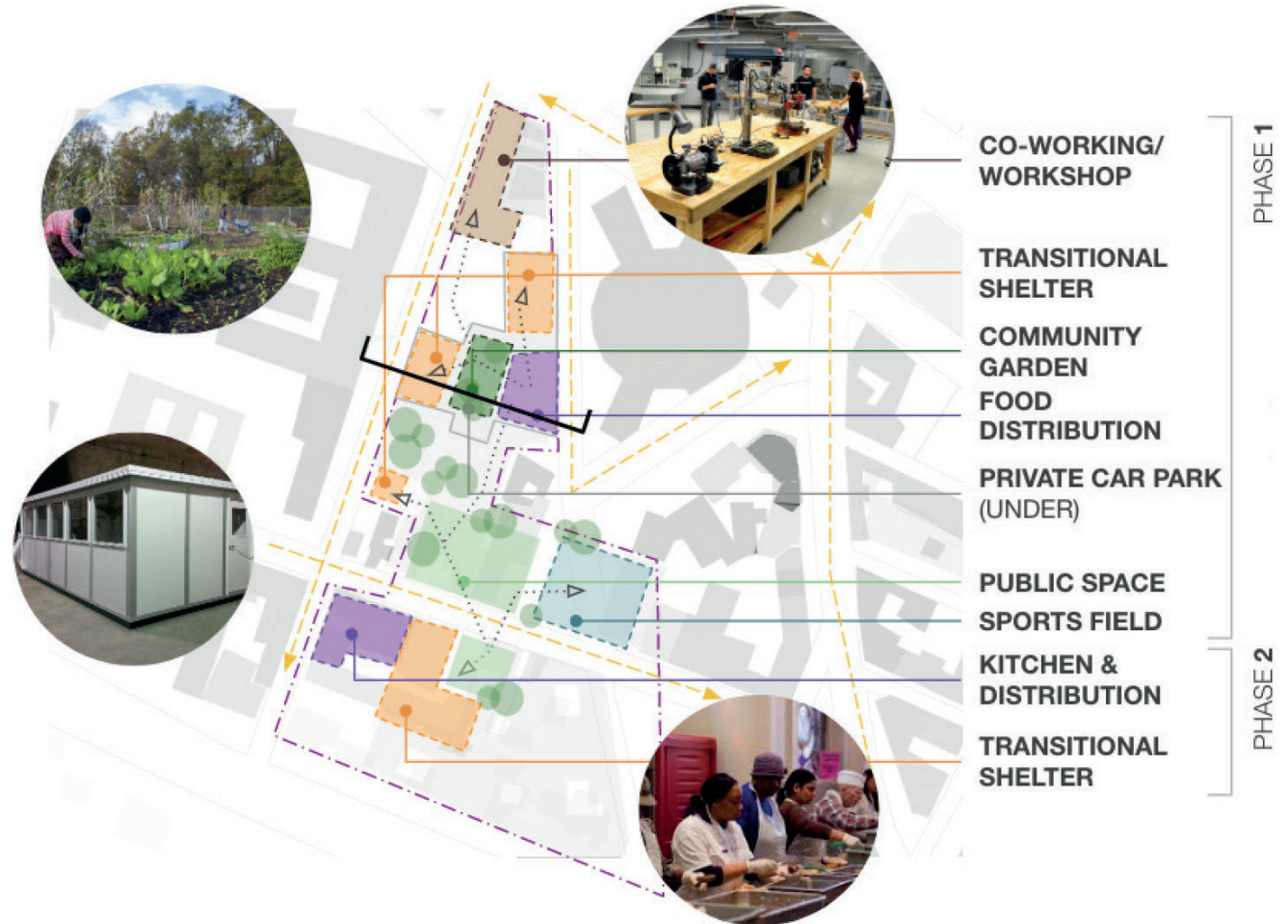
Step 4 - Joint small scale urban action

A small scale intervention (to be determined and discussed between all participants) will be developed on site with all the groups in order to contribute with our work to the betterment of the site.

Dissemination

A follow up written and graphic report is shared with the community leaders, municipality and participants. Likewise, an open event and presentation is held in which the final presentations are presented to all the stakeholders involved in the project. The construction or betterment intervention developed on site has been in many times continued by the community and been used for the betterment of the urban areas.

Over the years, the workshops have been in: Medellín, Colombia, Río de Janeiro, and Tijuana, Mexico, on urban regeneration and upgrading; two years on post-disaster reconstruction in Chamanga, Ecuador; and last year on Urban integration for refugees in Thessaloniki, Greece.



ENSAPB | Diplôme de Spécialisation en Architecture des Risques Majeurs (DSA-RM)

The post master program Architecture and Major Risks (DSA) develops the competence of architects in the prevention and management of major risks related to the living environment. Going beyond technicist responses, it takes risk management as a global action in a complex environment: architectural, urban, social, economic, human.

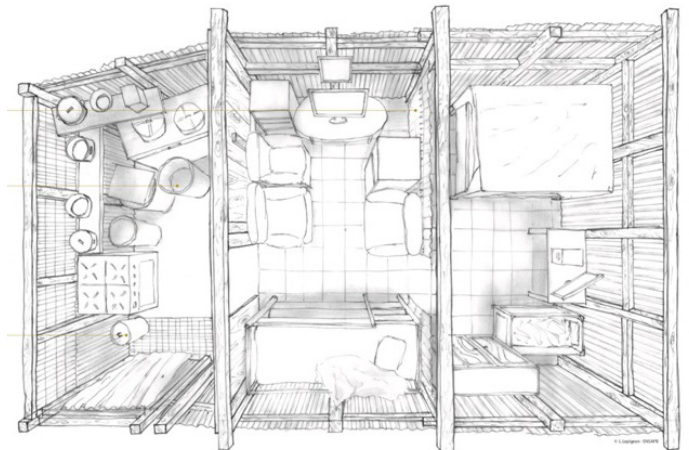
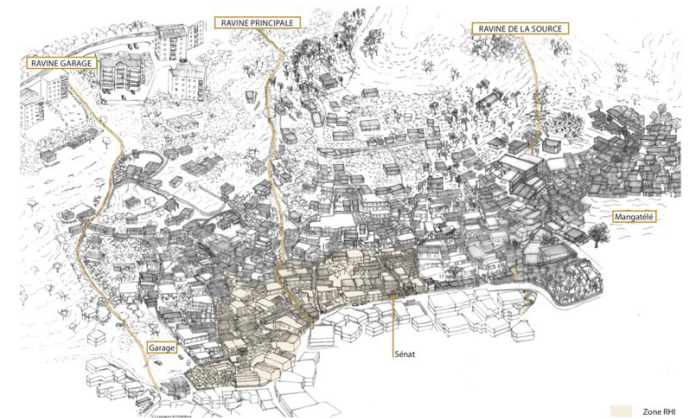
In the first year, students acquire solid technical knowledge in the prevention of risks of earthquakes, violent winds, floods, and other natural hazards or risks whose origin lies in the action of man. The work remains nevertheless rooted in architectural practice: training is driven by in-situ diagnostics and project development, which range from urban planning to building scale - in new project or in rehabilitation - up to at the urban and territorial scale.

The studies in first year brings the students in old cities in Eastern Mediteranea (Greece, Lebanon..) and in the Pyrénées, the mountains dividing Spain and France, that are subjects to all the natural hazards.

In the second year, the field of study opens up to the issues of sustainable development and the resilient city. Whether the disaster

happens, or whether it is latent and permanent (slum case), the semester deals with rural and urban development, the precarious city and reconstruction, convergent approaches between strong economies and weak economies, camps and spatial phenomena related to migration. Over the last years, the students worked in the Calais Jungle, in Colombia, in Nepal, in Haïti. For a few years now, it has been focusing on Mayotte, a small island between Madagascar and Mozambique, a french colony that houses the biggest slums in the whole France.

Supported by ENSA-PB, the training is based on the skills of architecture schools, including ENSA Paris Val-de-Seine, the School of Architecture of the City and territories of Marne-la-Vallée and the Université Paris Est. It is at the heart of a network of collaborations in France and abroad. This is the only program provided in France that focuses on the prevention and management of all major risks from the with the tools and the approach of the architect.



4 terms:

- Earthquakes and Hurricane, (with one trip to Lebanon or Greece)
- Flooding, (In the Pyrenees)
- Post Disaster, Emergency and Recovery Architecture, including slums and informal cities. (Nepal, Colombia, Haiti, Peru, Mayotte...)
- Four months minimal of practice.
- Graduation is then obtained through a thesis defense with a 60 to 100 pages document and a dedicated problematic.

Alumni/ae can join the Association des Architectes des Risques Majeurs that was set up by alumni of the program.

Entre les ombres

Bedros Telvizan, Hanna Eimot, Ana Dariela Ortiz Patiño

Le projet consiste en un module en bois à structure inclinée qui permet l'entrée de la lumière à différents moments de la journée, permettant aux enfants de jouer et de sécher leurs vêtements. Au cours de la matinée, nous avons allumé la zone des douches pour rendre cette activité agréable. Dans l'après-midi, nous avons également éclairé la zone du mur en pente afin que vous puissiez sécher vos vêtements.



04 - Design Thinking

Politecnico di Milano | Master of Design for Development - Architecture, Urban Planning and Heritage in the Global South

Program

The impacts of globalisation on cities and regions are creating huge socio-spatial imbalances, environmental emergencies and complex urban management problems, particularly in the regions of the Global South and in countries with emerging economies.

The Master's in Design for Development has been devised to meet these demands in the firm belief that the design disciplines can play a leading role in these new urbanisation processes.

Indeed, there is ever growing demand from all sides for design experts capable of navigating the challenging contexts of the Global South by bringing skills and expertise that focus on the governability and quality of urban and regional development.

DESIGN FOR DEVELOPMENT - Architecture, Urban Planning and Heritage in the Global South at Polytechnic University Milan is a post degree Master that aims train professionals with an international outlook capable of tackling the most difficult challenges posed by contemporary urban development with skill and creativity, based on an approach that blends research, design and innovation.

These new professionals will be offered a broad overview of design at a variety of scales, in which architecture, planning and heritage protection are all aspects of the same approach to design which aims to develop effective strategies for defending and developing the regions in which they operate in environmental and social terms.

The Master's programme is organised into five different modules:

Module A _Theory and Tools

Descriptions of the new global urbanism and main challenges that it poses for the design disciplines to foster strategies of inclusive, sustainable development in the contexts of the Global South. The theoretical component of the module will be supplemented by more detailed examinations of tools for regional analysis.

Module B _Design Workshops

A detailed examination of design strategies at the various scales and the different spheres of action on which the Master's programme focuses: urban growth and local resource management, housing and community services, and protection existing heritage.

Module C _ International Design Workshop

Students will attend a design workshop in Maputo, Mozambique, (a five-week program), in order to test out the methodologies and tools acquired during the course "on the ground". The case study is chosen to connect the workshop learning experience with a real project run by international organisations operating in the field in partnership with local institutions and the local community.

Module D_ Internship

Students will complete their international internship of at least three months at an organisation or in a professional context related to the themes dealt with during the Master's programme. This internship will thus act as a gateway to employment opportunities.

Module E_ Final Thesis

Students will prepare their thesis under the supervision of a tutor and present it at a public concluding seminar. The contents of the thesis will focus on deepening a thematic study of one of the topics covered during the Master.

Politecnico di Milano | Master of Design for Development - Architecture, Urban Planning and Heritage in the Global South

Pedagogical Principles

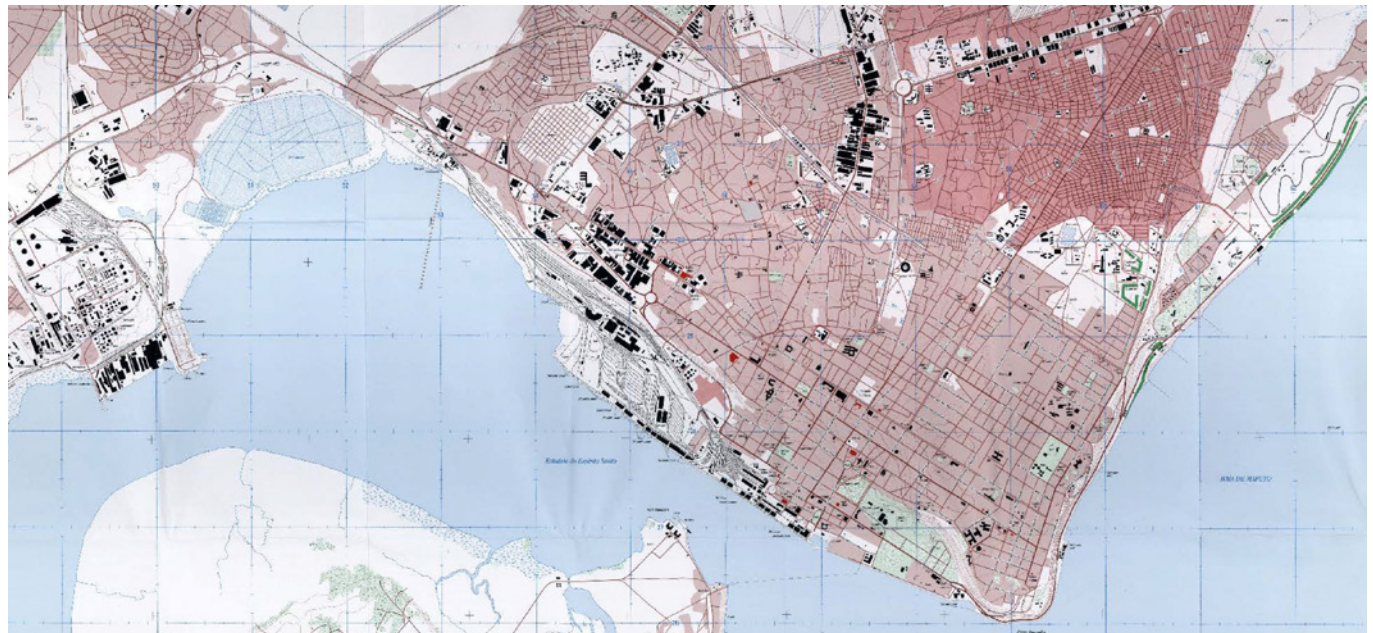
The Master's lessons are concentrated into one intensive week per month for the first five months, followed by an intensive period during which students will attend the overseas workshop, complete an international internship and prepare their final thesis. The characteristics of the course mean that it is mainly aimed at architects, urban planners, and civil and environmental engineers who are interested in working in the new scenario of the global urban development.

The Master's programme takes an original approach to teaching and learning, founded on:

- tight integration of theory and practical application through a learning-by-doing approach;
- a global perspective on understanding and interpreting urban phenomena;
- a specific design-oriented approach at the various scales, integrating architecture, planning and heritage protection;

- ample space dedicated to practical experience "on the ground" through a five-week international design workshop;
- an internship at an organisation operating in the Global South, designed to offer a potential route into employment in the field.

The Master's programme has a duration of 1,500 hours in total, consisting of lectures, exercises, visits, workshops and individual study, and an internship of 300 hours.



Humanitarian Logistics and Supply Chain Research Institute (HUMLOG Institute)

Who are we?

The Humanitarian Logistics and Supply Chain Research Institute (HUMLOG Institute) was founded in 2008 jointly between Hanken School of Economics (Hanken) and the Finnish National Defence University (NDU) in Helsinki, Finland. The aim of the HUMLOG Institute is to conduct research in areas of humanitarian logistics including disaster preparedness, response and recovery with the intention of influencing activities that will provide measurable benefits to persons requiring assistance. The legal representation of the institute is under Hanken School of Economics, Finnish business ID 0245907-7.

The HUMLOG Institute was set up to serve as a platform and a physical space for researchers from around the world to share ideas and disseminate knowledge in this field. The Institute has grown into a large international network of researchers, the HUMLOG Group, which the Institute co-ordinates. The board of the Institute includes representatives of the two founding universities as well as representatives of humanitarian organisations. Current board members include representatives of the National Emergency Supply Agency and the Finnish Red Cross. The HUMLOG team at Hanken comprises 26 researchers from 15

nationalities, plus an international network of formal associates residing around the world.

The humanitarian logistics track

This MSc. Business & Management program provides the essential capabilities and skills for the managing the development and running of businesses and organizations in a market-oriented and sustainable manner. The aim of the programme is to offer a Master of Science degree of high international standard that will give students the required competence to meet the challenges of an increasingly complex and dynamic marketplace. Particularly, the humanitarian logistics track prepares the students to:

- Understanding the needs of society and contributing to its robustness and resilience
- Liaising and practically co-operating with other organizations, both governmental and non-governmental, national and international
- Preparing, designing, managing, and developing the organization's supply chain on strategic and operational levels

The track prepares participants to work with governmental and non-governmental organisations in the areas of search and rescue, emergency preparedness and management, crisis management, and humanitarian logistics and supply chain management on a strategic level and in the field.



Humanitarian Logistics and Supply Chain Research Institute (HUMLOG Institute)

The FCA case

The Finn church aid (FCA) is the largest non-governmental organization (NGO) and the second largest provider of disaster relief in Finland. In 2016, 132 500 children benefited from FCA's education projects and many of the target countries are in Africa, Asia and Middle-East. The purpose of the building blocks project was to create an implementation guide for Finn Church Aid's school building projects from a supply chain perspective. The findings showcase that many factors combined create a complicated and unreliable atmosphere to implement the school building projects in the target countries during the aftermath of a disaster.



University of Venice & EAHR | Master Emergency & Resilience

Overview of the program

The Master 'Emergency & Resilience' is part of the 'Architecture is a Human Right' Manifesto (Topic 11 - New roles for architects).

The Master has base in Venice and is an exclusive master degree that improves the professional response of architects, engineers, geographers, logisticians and social scientists within the context of humanitarian emergencies, reconstruction and rapid urbanizations. The program is a joint venture between University of Venice IUAV and Emergency Architecture & Human Rights.

The Master 'Emergency & Resilience' has so far graduated 28 professionals who have gone on to position with UN Agencies, local governments and various development agencies.

The Master is a one-year program divided in 3 modules:

1. Emergency & Recovery
2. Reconstruction
3. Mitigation & Preparedness.

The program includes an 8 weeks internship in an international institution or local government working within the humanitarian and/or developing sector.

Academic objectives

1. To train practitioners in the field of architecture,

planning, engineering, social science among others to respond to the new humanitarian and development challenges of XXI century

2. To set up Emergency and Resilience as a discipline within architecture, engineering and other professional fields related to physical responses

3. To promote new professional roles and new job opportunities for architects and other professionals in the field of humanitarian emergencies

4. To provide an interdisciplinary and multidimensional approach to emergency situations
5. Emergency Relief (Module A) – Short-term approach addressing response in emergency crises through the immediate humanitarian relief

6. Reconstruction (Module B) – Focus on local cultures, social participation and circular economy

7. Resilience (Module C) – Focus on long-term mitigation solutions to ensure preparedness processes with a sustainable and context-tailored approach.

Methodology

Students are involved in group work and workshop to understand their role in the complex system of international cooperation

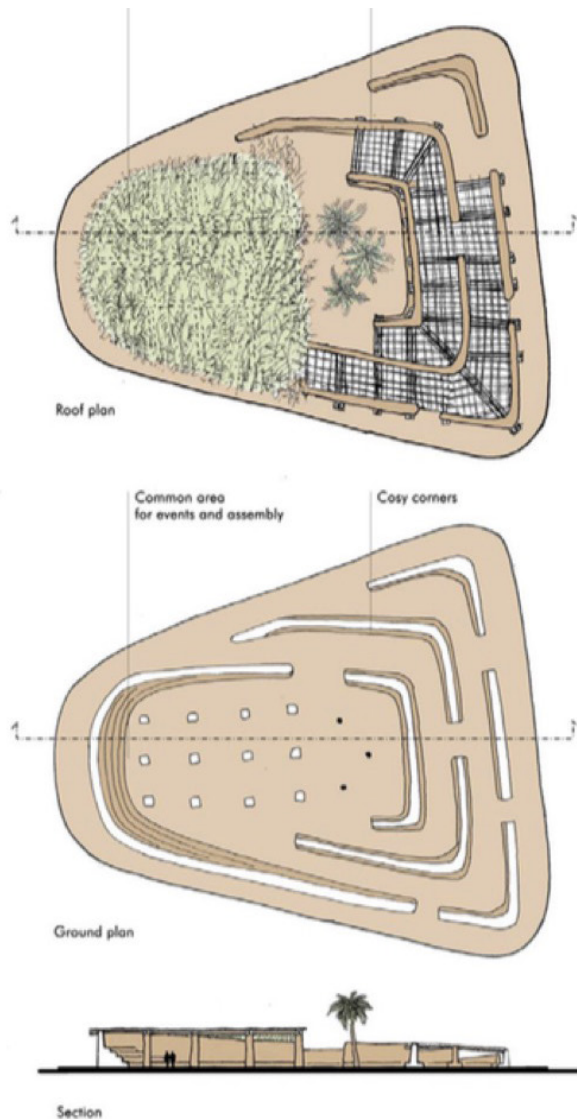
and to seek holistic solutions that integrate interdisciplinary knowledge and citizen participation.

There is a strong emphasis in applied research and the thesis is the final task to prove the new learned skills and show the possibility to create new knowledge in this professional field.

Learning outcomes

Divided into three main topics: Emergency & Recovery, Reconstruction and Mitigation & Preparedness, the program includes courses with a multidisciplinary and holistic approach to urban and architectural strategies that promote social cohesion.

Students will acquire the proper skills to develop a critical analysis and management capacity of complex problems in a variety of contexts, learn to maximize human resources to support local actors in post-disaster scenarios and tackle humanitarian emergencies in both developed and developing countries.



Case study – Siwa Oasis, Egypt

The methodology adopted in the program is developed in all tasks assigned during the years and in the field trip. In the frame of a collaboration between the University of Venice IUAV and the American University of Beirut (AUB), the 10 days field workshop took place in February 2018 in the Egyptian Oasis of Siwa.

The objective of the course were:

1. To identify and analyse vulnerabilities and resilience of Siwa urban community through PAR model and VCA tools.
2. To interact with regional cultures particularly when it comes to reconstruction and rehabilitation of towns and cities that have been damaged and destroyed either by neglect, desertion, dilapidation or natural disasters and/or destruction through wars.
3. To work with a multidisciplinary approach and with the local communities towards the goal of, reconstructing and rehabilitating.
4. To communicate effectively to the community and to possible donors and partners the adopted strategy.

The workshop started with a review of secondary sources and community baseline data provide from our local partner. When the students arrived to Siwa they were divided in groups and continued their work with semi-structured interviews and focus group discussions. Furthermore students engaged with the local community to understand local vulnerabilities and capacities focusing on facilitation, co-creation and mitigation. After a 3 days hand-on experience with the local workers, expert in vernacular building technique they presented a final report to Siwa community representatives and UNESCO employees.



Discussion of Publication Ideas

The discussions that followed the individual presentations and those that sought to find patterns in the pedagogical approaches being used across them divided into two sections. The first concerns issues related to the patterns of similarity and difference across the pedagogical approaches being used. The second related to ideas of the potential of revising the case studies in a suitable format and structure for a book.

Key questions in relation to the former often concerned issues related to the nature of architecture and design education, including:

- The practice of designing for a much wider range of clients than in commercial architecture, many of which are marginalized and may have few resources
- The ethical + political dimensions of design as a break with modernist practice
- The consequent challenge of doing “architecture without architecture”
- Importance of teaching ethics in Master programs
- The importance of critical reflection on

design for displacement and disasters as the “new normal”

- Integrating teaching with research – co-produced, evidence-based practice
- The importance of integrating conceptual knowledge of relevant global issues, field-based studios and simulations.
- The importance of integrating systems thinking and design thinking as pedagogical and professional tools.

Key questions in relation to the possible book project included:

- Who is the audience? What is the core of the book?
- The book would be a valuable guide for universities to start their own degrees, showcasing the variety of different aspects and disciplinary approaches, and perhaps assisting to position universities in the humanitarian sector
- A risk of a book being a “catalogue” without a deep intellectual framing of issues and challenges, e.g. is the focus on design

for the urban crisis (exceptionalism) or for the uncertainties of “the new age of the city”?

- The need to therefore integrate such issues in at least three ways: (i) in a series of context-setting chapters, (ii) analysis within each case study chapter, and (iii) a series of cross-case analyses following the case study chapters.
- Might a Website be more appropriate to achieve our goals? Could a book and website be developed in parallel?

Conclusion

A number of types of publications could be developed. These include the book proposal that was discussed at the workshop (amended as per the discussion) and/or a website/portal; a special issue of an appropriate journal, etc. Individuals or teams that wish to develop publication proposals of different types are welcome to develop proposals and invite contributions from network members and others not present.

Part 2 | Research Collaborations

Boaz Kogan of RMIT Europe provided a presentation on a range of research schemes in the EU Horizon2020 (and the post-2020 Horizon Europe) program.

The focus was on the *Goals of Excellent Science* (through *Marie Skłodowska-Curie Actions*) and *Societal Challenges* (under the themes of Human Security and Climate Change).

Five schemes were outlined:

Innovative Training Networks (ITN)

ITN drive scientific excellence and innovation. They bring together universities, research institutes and other sectors from across the world to train researchers to doctorate level.

Research and Innovation Staff Exchange (RISE)

RISE funds short-term exchanges of personnel between academic, industrial and commercial organisations throughout the world. It helps people develop their knowledge, skills and careers, while building links between organisations working in different sectors of the economy, including universities, research institutes and SMEs.

Co-funding of regional, national and international programmes (COFUND)

COFUND provides organisations with additional financial support for their own researcher training and career development programmes. The extra funds are available for new or existing schemes for training researchers abroad and across various sectors. This scheme was discussed at the 2018 Forum and RMIT Europe submitted a proposal in which a number of cotutelle PhD studentships would be available. This was not successful in 2018 but a revised submission was being made in September 2019. If successful, the 2109 submission would provide for three cotutelle places for research in the field of design for resilience between RMIT, UIC and Aalto University.



Individual Fellowships (IF)

IF are great opportunities if you are an experienced researcher looking to give your career a boost by working abroad. They offer exciting new learning opportunities and a chance to add some sparkle to your CV.

European Researchers' Night (NIGHT)

This is a Europe-wide public event dedicated to popular science and fun learning. It takes place each year in September. Around 30 countries and over 300 cities are involved.

Most interest during the discussion was in the RISE and ITN schemes, with a view to possible RISE application in April 2020 and an ITN application in January 2021. RISE applications could include a wide range of universities and industry partners while ITN applications are best for a small number of partners with strong research and research training records.

Part 3 | Formalizing the DDD Network

After the two fora in 2018 and 2019, discussions turned to formalizing the network by establishing working groups this year across the main platforms that emerged.

These were:

- **Organisation of the Network**
- **Publications**
- **E2020 Grants**
- **Capability Framework**

These were discussed in terms of exploring the potential of forming an academic-practitioner network to work together in a co-ordinated and productive way as the main academic-practitioner network in the displacement, design and development area across Europe and, perhaps, Asia.

Some of the topics discussed included:

- Synergies for common sites/areas universities are working in to avoid 'quick changes' between disaster zones
- The importance of including partners in the Global South – effecting a shift to where knowledge is being produced
- Local partners can use universities as a research resource
- What do partnerships with local institutions look like?
- Can there be common field trips, internships, workshops across university programs?
- How can architects make themselves heard in the humanitarian sector?
- There was perhaps no need for a working group on “capability frameworks” as these have been developed already. Several were shared, but some participants viewed them as problematic. Therefore it was recommended that an analysis of the scope, details and advantages/disadvan-

tages of using “capability frameworks” to guide curriculum development could be prepared as a briefing paper and/or as a possible chapter in any book publication from the network.

Part 4 | Where to next? Future Working Groups



After two Disaster, Design and Development workshops in 2018 and 2019, it was suggested that we establish working groups across 4 main platforms below so that we can begin to work together in a coordinated and productive way as the main academic practitioner network in the DDD area across Europe and Asia:

It is aimed to have these working groups representing our DDD consortia by December 2019.

Summary

The forum concluded with participants invited to share their thoughts on the forum presentations and discussions and their ideas for future activities. Key points of reflection included:

1. It is positive to see the growth of the network and possibilities opening up for future collaborative teaching and research activities. We have a variety of different interests and programmes, but share common ground in the relevance of the design professions to global challenges. This provides important opportunities to learn from other universities.
2. The network forum process is an ideal opportunity to share knowledge and opinions with like-minded scholars. It assists in defining ourselves, which is important when our work in design for disaster, displacement and development is often not considered mainstream by some universities.
3. The publication ideas that were discussed should be pursued by those interested in order to promote teaching programs and research in the field of design for disaster, displacement and development. Such publications could be valuable for other scholars and universities entering this field.
4. The proposals for developing collaborative applications for H2020 and Horizon Europe projects should be taken further, especially for building research capacity and doctoral studies.
5. UNHCR and related international agencies encourage universities to engage with them in an academic-practitioner network. One idea could be to explore the idea of forming an academic-practitioner Working Group of the Global Shelter Cluster.
6. The network can be strengthened by extending beyond a group of universities and inviting other partners, and by extending beyond Europe to other regions.



Participating Institutions

RMIT UNIVERSITY

Esther Charlesworth

esther.charlesworth@rmit.edu.au

John Fien

john.fien@rmit.edu.au

GUEST SPEAKER

Miguel Urquia

urquia@unhcr.org

UIC BARCELONA

Carmen Mendoza Arroyo

cmendoza@uic.es

Raquel Colacios

rcolacios@uic.es

AALTO UNIVERSITY

Saija Hollmen

saija.hollmen@aalto.fi

Matleena Muhonen

matleena.muhonen@aalto.fi

KU LEUVEN

Kelly Shannon

kelly.shannon@kuleuven.be

Bruno de Meulder

bruno.demeulder@kuleuven.be

UNIVERSITY OF WESTMINSTER

Tony Lloyd Jones

T.L.Jones@westminster.ac.uk

THE HUMANITARIAN LOGISTICS INSTITUTE (HUMLOG INSTITUTE)

HANKEN SCHOOL OF ECONOMICS

Kristjana Adalgeirsdóttir

kristjana.adalgeirsdottir@aalto.fi

Diego Vega

diego.vega@hanken.fi

POLITECNICO DI MILANO

Camillo Magni

camillo.magni@polimi.it

UNIVERSITY COLLEGE LONDON

Camillo Boano

camillo.boano@gmail.com

UNIVERSITÀ IUAV DI VENEZIA

Michele di Marco

micheledimarco@ea-hr.org

Partners



Architecture
& Urban Design

RMIT University
Design and Creative Practice + Social Change
Enabling Capabilities Platforms



Cover Image & Full Page Images: Dadaab Refugee Camp, Kenya
© UNHCR Americas (Creative Commons licensed, images edited)